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Fatigue Reliability: Introduction, Committee on Fatigue and Fracture Reliability of the Committee on Structural Safety and Reliability of the Structural Division, ST Jan. 82 p3-23.

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Reliability of Spot Welds in Cold-Formed Channels, Andrzej S. Nowak and Peria V. Regupathy, ST June 84 p1265-1277.

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Reliability Based Optimum Design of Concrete Frames, Adang Surahman and Kamal B. Rojiani, ST March 83 p741-757.

Structural Reliability Analysis of Series Systems, Lidvin Kjergenroen and Paul H. Wirsching, ST July 84 p1495-1511.

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Marine Parkway Bridge Truss Member Replacement, Robert A. Martin and Jerome S. B. Iffland, ST July 83 p1602-1616.

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Bridge Loading: Research Needed, Committee on Loads and Forces on Bridges of the Committee on Bridges of the Structural Division, ST May 82 p1012-1020.

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Fatigue Life of Welded and Bolted Repair Parts, T. Yamasaki, Y. Kawai and Y. Maeda, ST Oct. 84 p2499-2512.

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Dynamic Considerations in Latticed Structures, Task Committee on Latticed Structures under Extreme Dynamic Loads of the Committee on

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R/C Frame Models: Observed Seismic Response, Haluk Ceyhan, ST Dec. 84 p3015-3030.

R/C Frame Models: SIP Studies on Seismic Response, Haluk Ceyhan, ST Dec. 84 p3031-3042.

Seismic Response of R/C Frame Wall Structures, Ahmet E. Aktan and Vitelmo V. Bertero, ST Aug. 84 p1803-1821.

Seismic Response of Vertically Irregular Structures, Jack P. Moehle, ST Sept. 84 p2002-2014.

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Subjective Seismic Safety Assessments, Colin B. Brown, Jerald L. Johnson and James J. Loftus, ST Sept. 84 p2213-2233.

Seismic tests

Interim Summary Report on Tests of 7-Story RC Building, United States/Japan Joint Technical Coordinating Committee, ST Oct. 84 p2393-2411.

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Tension Failure Criteria for Plain Concrete Masonry, Robert G. Drysdale and Ahmad A. Hamid, ST Feb. 84 p228-244.

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Finite Element Model for Composite Masonry, Subhash C. Anand and David T. Young, ST Dec. 82 p2637-2651.

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R/C Member Cyclic Response During Various Loadings, Tze-How Hwang and Charles F. Scribner, ST March 84 p477-489.

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Containment Liner Anchor Load Tests, Edwin G. Burdette and Branko Galunic, ST Jan. 84 p1-9.

Influence of Reinforcement on RC Short Column Lateral Resistance, Kyle A. Woodward and James O. Jirsa, ST Jan. 84 p90-104.

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Outrigger-Braced Coupled Shear Walls, Fouad R. Moudarres, ST Dec. 84 p2876-2890.

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Influence of Door Openings on Effective Slab Width, Alex Coull and Yang Chee Wong, ST Oct. 84 p2531-2535.

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Shallow-Buried RC Box-Type Structures, Theodore Krauthammer, ST March 84 p637-654.

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Low-Rise Timber Buildings Subjected to Seismic, Wind and Snow Loads, Lawrence A. Soltis, ST Apr. 84 p744-753.

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Computer Analysis/Design of Large Mat Foundations, Steven C. Ball and James S. Notch, ST May 84 p1180-1196.

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Thermal Loading of Concrete Roofs, Malcolm J. S. Hirst, ST Aug. 84 p1847-1860.

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Fatigue Reliability: Introduction, Committee on Fatigue and Fracture Reliability of the Committee on Structural Safety and Reliability of the Structural Division, ST Jan. 82 p3-23.

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Fatigue Behavior of Butt Welds with Slag Inclusions, Mark D. Bowman, William H. Munse and William Will, ST Dec. 84 p2825-2842.

Strength Formula for Tapered Beam-Columns, Hiroyuki Shiomi and Muneaki Kurata, ST July 84 p1630-1643.

Ultimate Load Behavior of Trapezoidal Steel Decks, Nandivaram E. Shanmugam and Seng-Lip Lee, ST Aug. 84 p1747-1756.

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Double-Tapered Glulam Beams: Finite Element Analysis, George E. Kechter and Richard M. Gutkowski, ST May 84 p978-991.

Simple Analogous Frames for Shear Wall Analysis, B. Stafford-Smith and Amal Girgis, ST Nov. 84 p2655-2666.

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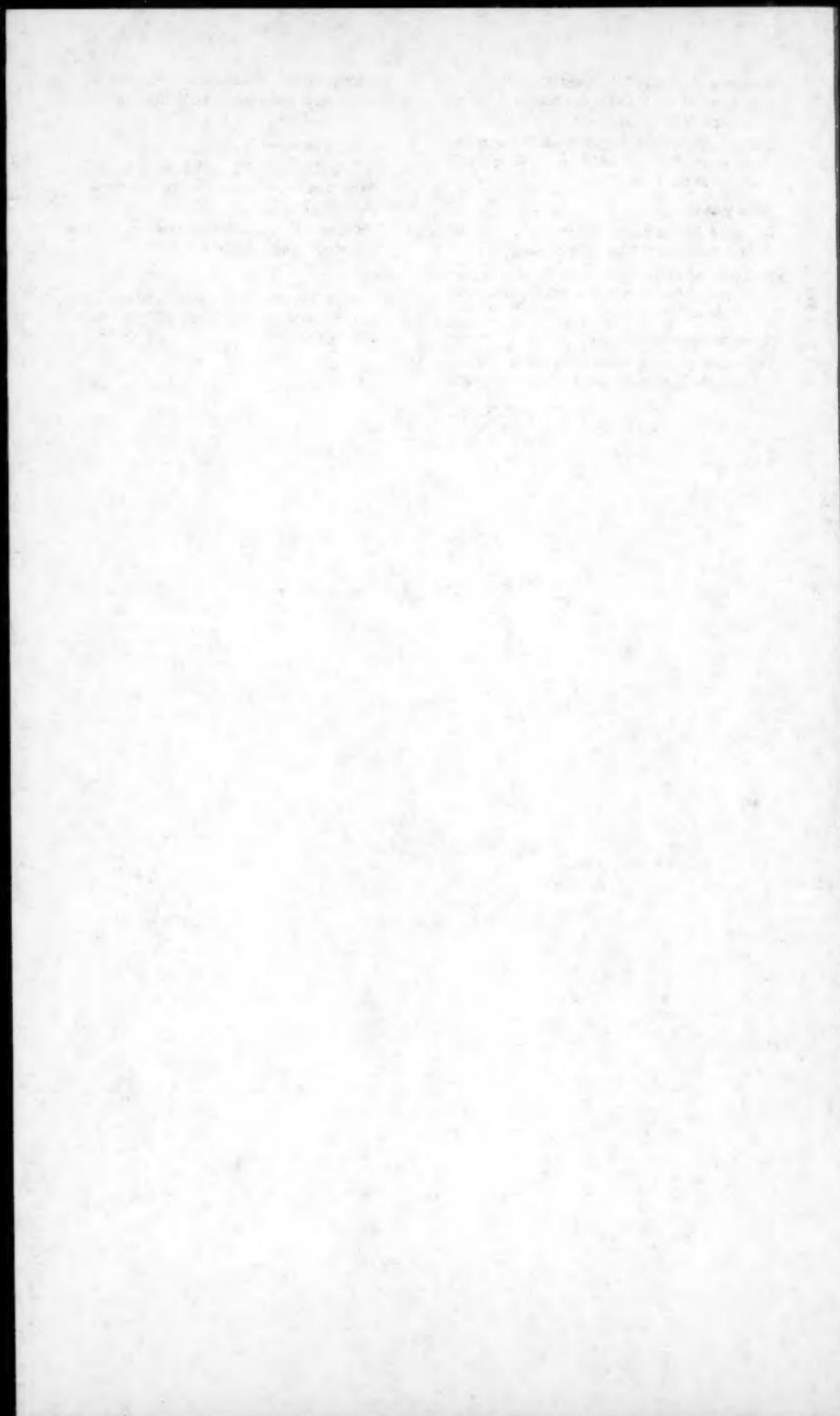
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